

PROCEEDINGS  
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## THE AMERICAN SPECIES OF THE GENUS GRIPHONEURA SCHINER (DIPTERA, SAPROMYZIDAE).

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This genus is distinguished from its allies by the very pronounced forward rounded curvature of the fourth vein at its apex which approaches rather closely to fourth vein at tip, causing the first posterior cell of wing to be only narrowly open or almost closed at apex. The head is similar to that of *Minnettia*, and the posterior intra-alar bristle is present as in that genus.

Hendel gives a very full description of the genus and a good figure of the genotype, *imbuta* Wiedemann, in *Genera Insectorum* (Fasc. 58, page 51, and Plate 2, fig. 22).

A careful examination of a large series of specimens of this genus from South America discloses the fact that the males of the species available have a few fine hairs at apex of fore tibia on posterior side which project forward over the surface of a shining flattened area on the same side of basal segment of tarsus that is more or less marked off by a slight edging and occupies from one-third to four-fifths of the length of the segment. This area is not shown in the figure by Hendel, nor is it present in the females nor in the male of the only Oriental species I have before me. There are two described species occurring in South and Central America.

I have not seen *ferruginea* Schiner from South America but *imbuta* is present in my material and with it specimens closely related to it but evidently belonging to undescribed species. Like *imbuta* these species are black, with the wings marked with fuscous apically. I append a diagnosis to facilitate identification.

## KEY TO SPECIES.

1. Extreme apex of wing whitish hyaline from apex of second vein round margin posteriorly; frons ochreous; femora yellowish basally to a greater or lesser extent, sometimes fuscous only at apices; fore tarsi of male slender, distinctly longer than tibia, flattened area not half the length of segment; the entire length of latter equal to fully two-thirds that of tibia; first posterior cell of wing almost closed at tip, the third and fourth veins almost touching at apices.....*alboapicata*, sp. n.
- Extreme apex of wing fuscous, sometimes hyaline on margin from behind apex of first posterior cell; frons largely black; femora black; fore tarsi of male stout, not longer than tibiae, the flattened area at least two-thirds the length of segment, the entire length of latter about half that of tibia; first posterior cell of wing distinctly though narrowly open at apex.....2.
2. Dark apical cloud on wing commencing at or before apex of first vein, more than apical half of wing blackened on costa.....3.
- Dark apical cloud on wing commencing considerably beyond apex of first vein, a little less than half of the wing blackened on costa....4.
3. Wing dark brown except basad of a line drawn from apex of basal cell to apex of first vein, the basal outline of dark part irregular, apical posterior margin not so dark as anterior section; third antennal segment black.....*atricornis*, sp. n.
- Wing dark brown from below apex of first vein to tip, the dark color forming a costal band anteriorly, but spreading over disc of wing from a little before vertical line of outer cross-vein, the suffusion covering apex of wing from a little beyond outer cross-vein, less intense posteriorly; third antennal segment reddish brown.....*suffusa*, sp. n.
4. Flattened area of fore metatarsus occupying not over two-thirds of length of segment .....*imbuta* Weid.
- Flattened area of fore metatarsus occupying four-fifths of length of segment.....*affinis*, sp. n.

From all of the species in the above key *ferruginea* Schiner may be distinguished by the ferruginous color of thorax and abdomen, all the others being entirely or almost entirely black.

*Griphoneura alboapicata*, sp. n.

The frons and antennae are generally ochreous and there is sometimes a hyaline streak in center of each cell of wing connecting with the clear apical margin. The flattened area on fore metatarsus is more widened than in the other species.

Length, 5 mm.

Type, male, allotype, 4 male and 1 ♀ paratypes, Higuito, San Mateo, Costa Rica (P. Schild).

Type in U. S. National Museum.

***Griphoneura atricornis*, sp. n.**

Female.—The head is black, with the face becoming paler, yellowish, below. The palpi are yellow. First posterior cell of wing narrowly open at apex.

Length, 5 mm.

Type, Para, Brazil (Baker).

Type in author's collection.

***Griphoneura suffusa*, sp. n.**

Female.—Frons rufous in front; face black; third antennal segment and apices of palpi reddish yellow. First posterior cell open.

Length, 5 mm.

Type, Para, Brazil (Baker).

Type in author's collection.

***Griphoneura imbuta* Wiedemann.**

The commonest American species of the genus, represented by many specimens in U. S. National Museum collection, mostly from Costa Rica.

***Griphoneura affinis*, sp. n.**

Male and female.—In addition to the structural difference between this species and *imbuta* mentioned in the key the wings are more yellowish basally, owing to the clear yellow veins, than they are in *imbuta*.

Length, 5 mm.

Type, male, allotype, 2 male and 1 ♀ paratypes, Juan Vinas, Costa Rica (P. Schild).

Type in U. S. National Museum.